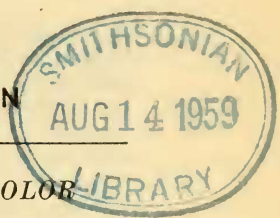


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PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON



THE TYPE LOCALITY OF *FELIS CONCOLOR*  
*CONCOLOR* LINNAEUS

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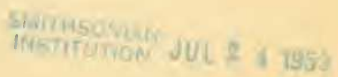
The original description of *Felis concolor* Linnaeus (1771, Mantissa Plant., p. 522) is based on a diagnosis from Brisson and references to Maregrave, Ray and Buffon, as follows.

- “FELIS cauda elongata, corpore immaculato fulvo.
- “Felis ex flavo rufescens mento et infimo ventre albicantibus. *Briss[on]*, 1756, *Regnum Animale*] *quadr.* 272
- “Cuguacu arana *Margr[avius]*, 1648, *Historia rerum naturalium Brasiliae*], . . . 235, *Raj. quadr.* 169. *Buff[on]*, 1761, *Hist. Nat.*] *quadr.* 9 t. 19
- “*Habitat* in Brassilia.”

Brisson's description of the puma is taken from Maregrave and from several other references (Barrère, Ray, Klein) which are also based essentially on the Brazilian *cuguacuarana* of Maregrave. Barrère (1741, *Hist. Nat. France équinoxiale*, p. 166), added a description of the puma of French Guiana to that of the *cuguacuarana*. On this authority, Brisson included *Guiane* as well as *Brésil* in the habitat of the cat. Buffon (supra cit., in text p. 217), gave the Guianas, Brazil, Paraguay, Peru, and eastern United States as the range. Linnaeus, nevertheless, gives only Brazil as the type locality. This action automatically restricts the type of *Felis concolor* Linnaeus to Maregrave's *cuguacuarana*.

The precise place of origin of the puma described by Maregrave is known. According to Thomas (1911, *Proc. Zool. Soc. London*, 1911: 123-124), "Maregrave stayed at 'Moritzstadt,' now Recife, most of his time, 1640-1644, while even his excursions were limited to the coast region between 5° 45' and 11° 11' S., thus taking in little more than from Rio Grande do Norte to Alagoas, a region at the centre of which Pernambuco lies." Accordingly, authors have generally accepted "Pernambuco" as type locality of the animals described by Maregrave.

In his preliminary revision of the pumas, Merriam (1901, *Proc. Washington Acad. Sci.*, 3:593) gave "Brazil (probably southeastern Brazil)" as type locality. He regarded a skull from Piracicaba, São Paulo, as representative. Merriam had no more Brazilian material than this skull, said to be deformed, and another without particular locality. Insofar as Merriam identified his Brazilian specimens with the nominal *species*,



he was absolutely correct. The same would be true, had he identified Canadian pumas as zoological representatives of the *species*. On the other hand, treatment of the Piracicaba skull as "typical," by Nelson and Goldman (1929, Journ. Mammal., 10:345) and designation of the "vicinity of São Paulo" as type locality of the subspecies *Felis concolor concolor* Linnaeus is neither zoologically nor geographically correct.

In 1946, Goldman (in Young and Goldman, The puma, p. 202) recognized that his and Nelson's earlier designation of São Paulo as type locality was based "on an erroneous assumption." Unhappily, Goldman went on to reason that inasmuch as Linnaeus' principal [!] reference is to Brisson "who in turn cited Barrère as his first and main [!] authority," the type locality of *concolor* must be Cayenne, French Guiana. At the same time Goldman recognized Maregrave's Brazilian *cuguacuarana* as the first synonym of the Linnaean *concolor* and thus nullified his own choice of French Guiana as type locality. Evidently, Goldman did not fully appreciate the fact that only Linnaeus, not Brisson or Barrère, is author of the name *concolor*, and that Linnaeus, not Goldman, is first reviser. Linnaeus' designation of Brazil as type locality and, indirectly, the *cuguacuarana* of Maregrave as type by elimination, are unequivocal and incontrovertible.

The evidence presented here affects the status of each of several other names proposed for pumas. *Felis concolor greeni* Nelson and Goldman, based on a single specimen from Rio Grande do Norte, Brazil, is practically topotypical of the Linnaean *concolor* and becomes, therefore, an absolute synonym of it. *Felis concolor capricornensis* Goldman, based on the Piracicaba skull described by Merriam as abnormal, cannot be seriously regarded as distinct from any other Brazilian puma, particularly the nominate race.

The earliest available name for the puma of the Guianan region is *Felis discolor* Schreber. The name was proposed in 1775 in the caption to a colored plate (Säugethiere, 2: plate 104 B). The animal figured is a copy of the *black tiger* of Pennant (1771, Synopsis Quadr., pl. 181, fig. 2 [figure only, not text which is based primarily on the *jaguarété* of Maregrave]. Schreber's formal description of *discolor* appeared two years later (1777, Säugethiere, 3:393, 586). It contains the appropriate bibliographic reference to Pennant, to the *once* of Des Marchais (1731, Voyage, 3:300) and an interrogatory reference to the Brazilian *jaguarété* of Maregrave (1648, Hist. rerum Nat. Brasil., p. 235) which is a melanistic form of the jaguar (*Felis onca* Linnaeus). Schreber gave only South America as the habitat of *discolor*. Nothing is known of the place of origin of Pennant's *black tiger* but Des Marchais's *once*, which Schreber notes particularly, is from French Guiana. This country therefore, is here accepted as the restricted type locality of *Felis concolor discolor* Schreber.

Two names without descriptions proposed for pumas by Lesson (1842, Nouv. Tabl. Reg. Anim., p. 50), are *wavula*, from Demerara, British Guiana, and *soasoaranna* from the savannas of the Rio Orinoco, Venezuela (cf. Schomburgk, 1840, Ann. Nat. Hist., 4:325). *Felis concolor anthonyi* Nelson and Goldman (1931, Journ. Washington Acad. Sci., 21:209) from the Rio Orinoco at the base of Mt. Duida, Venezuela, is practically a topotype of *soasoaranna*. As Goldman (1946, The puma,

p. 200) places *soasoaranna* together with *wavula* in the synonymy of his *concolor* (= *discolor* Schreber) his treatment of *anthonyi* as a distinct subspecies is paradoxical. Actually the original description of *Felis concolor anthonyi* which is known from a single specimen, does not take into account either the real range of individual variation or the real geographic range of the individual and of the race to which it may belong. In any case, there is no convincing evidence that more than one kind of puma, namely, *Felis concolor discolor* Schreber, lives in the area embraced by the Rios Orinoco-Negro and Amazonas as well as the whole of the Amazonian drainage basin east of the Andes.

The above discussion may be summarized by the following classification.

#### *Felis concolor discolor* Schreber

*Felis discolor* Schreber, 1775, Säugthiere, 2:plite 104 B (animal *ex* Pennant, 1771, Syn. Quadr., pl. 181, fig. 2). Schreber, 1777, Säugthiere, 3:393, 586—description.

[*Felis concolor*] var. *Wavula* Lesson, 1842, Nouv. Tabl. Reg. Anim., p. 50—type locality, Demerara, Br. Guiana; nomen nudum?

*Felis concolor* var. *soasoaranna* Lesson, 1842, Nouv. Tabl. Reg. Anim., p. 50—type locality savannas of the Río Orinoco, Venezuela; nomen nudum?

*Felis concolor* var. *Niger* Lesson, 1842, Nouv. Tabl. Reg. Anim., p. 50—part, new name for *Felis discolor* Schreber.

*Felis concolor anthonyi* Nelson and Goldman, 1931, Journ. Washington Acad. Sci., 21:209—type locality, Playa del Rio Base, southeast base of Cerro Duida, Amazonas, Venezuela.

*Felis concolor borbensis* Nelson and Goldman, 1933, Journ. Washington Acad. Sci., 23:524—type locality, Borba, Rio Madeira, Amazonas, Brazil.

*Felis concolor concolor*, Goldman (not Linnaeus), in Young and Goldman, 1946, The puma, mysterious American cat, p. 200.

#### *Felis concolor concolor* Linnaeus

[*Felis*] *concolor* Linnaeus, 1771, Mantissa Plant., p. 522—name based primarily on the *cuguacuarana* of Marcgrave; type locality, Pernambuco, Brazil, by restriction (cf. Thomas, 1911, Proc. Zool. Soc. London, 1911:123-124).

*Felis sucuacuara* Liais, 1872, Climats, géologie, faune et géographie botanique du Brésil, p. 461—type locality, Brazil, here restricted to the lower Rio São Francisco whence Liais recorded most of the animals he described.

*Felis concolor greeni* Nelson and Goldman, 1931, Journ. Mammal., 21: 211—type locality, Curraes Novos, Rio Grande do Sul, Brazil.

*Felis concolor capricornensis* Goldman, in Young and Goldman, 1946, The puma, mysterious American cat, p. 246—type locality, Piracicaba, São Paulo, Brazil.